



Capability Area Review – Land Attack Weapons



Capability Area Review

Land Attack Weapons

October 12, 2004

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Capability Area Reviews



Capability Area Review – Land Attack Weapons

- Capability Area Reviews – new process
 - Provide Department leadership an overall context and understanding of a mission area
 - Acquisition and management of net centric, systems-of-systems, and interdependent systems
 - Aligns with the capability focus implemented in the requirements process
- Critical link to roadmaps
 - Shape the Department's acquisition vision

Capability Area Reviews



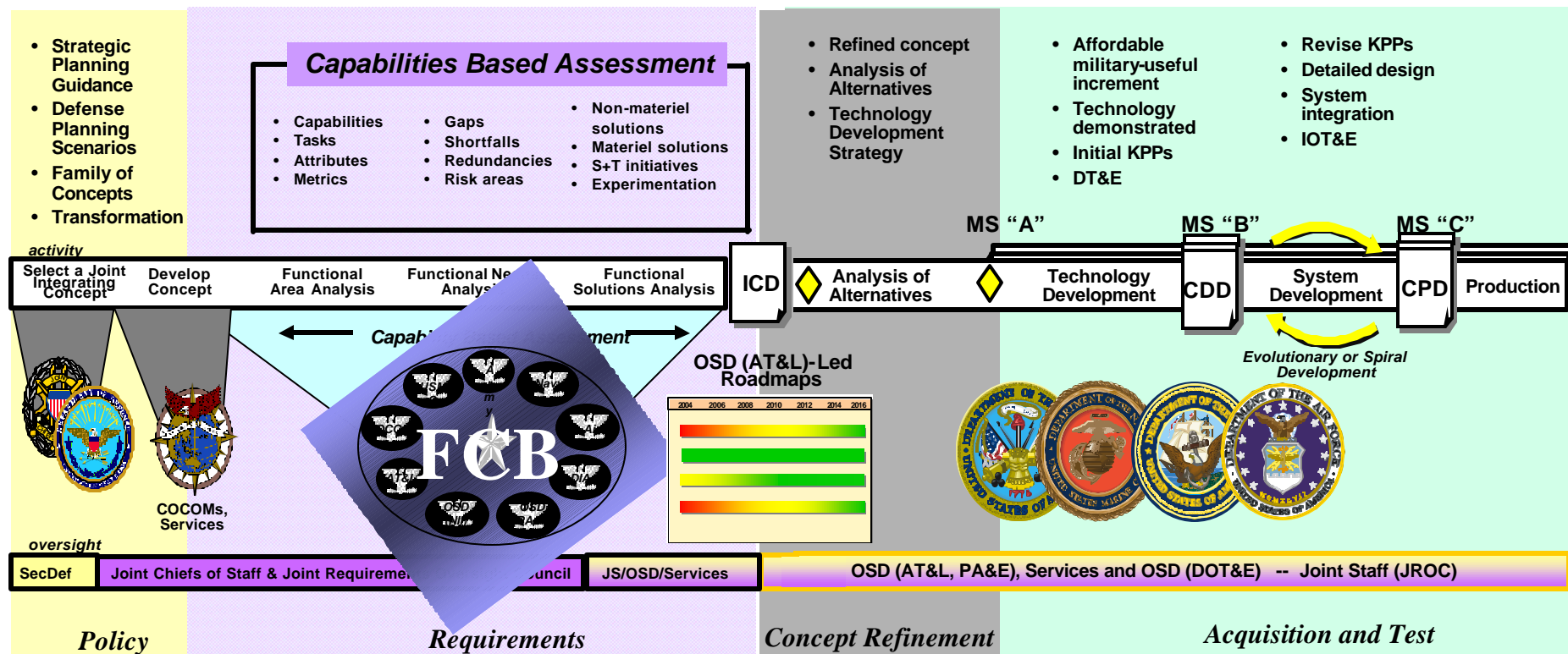
Capability Area Review – Land Attack Weapons

- So far, in 2004
 - Integrated Air & Missile Defense
 - Land Attack Weapons Review
 - Joint Battle Management, Command and Control
- In the works
 - Electronic Warfare
 - Unmanned Aerial Vehicles



DOD End-to-End Requirements, Acquisition, and Test Process

Capability Area Review – Land Attack Weapons



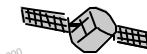
Focus of this Presentation



Capability Area Review – Land Attack Weapons

- Land Attack Weapons Review
 - Laying foundation for Conventional Engagement Capabilities Roadmap
 - Exploring the land attack weapons portfolio to adequately address where we are, where do we want to be, what do we need to get there
 - IPT members include Services, OSD Offices, Joint Staff, Defense Agencies, COCOM Reps

Land Attack Weapon Portfolio



GPS & Comm



ISR

Capability Area Review – Land Attack Weapons

- Large Portfolio
- Army, Navy, and Air Force
- Air-, ground-, and sea-launched
- Precision capability (INS/GPS, seekers, etc)
- Direct attack to long range standoff
- Prosecute fixed, relocateable, and moving targets



JASSM

Hellfire
JCM

Tomahawk

SLAM-ER

JDAM
SDB

LGB

Maverick

WCMD

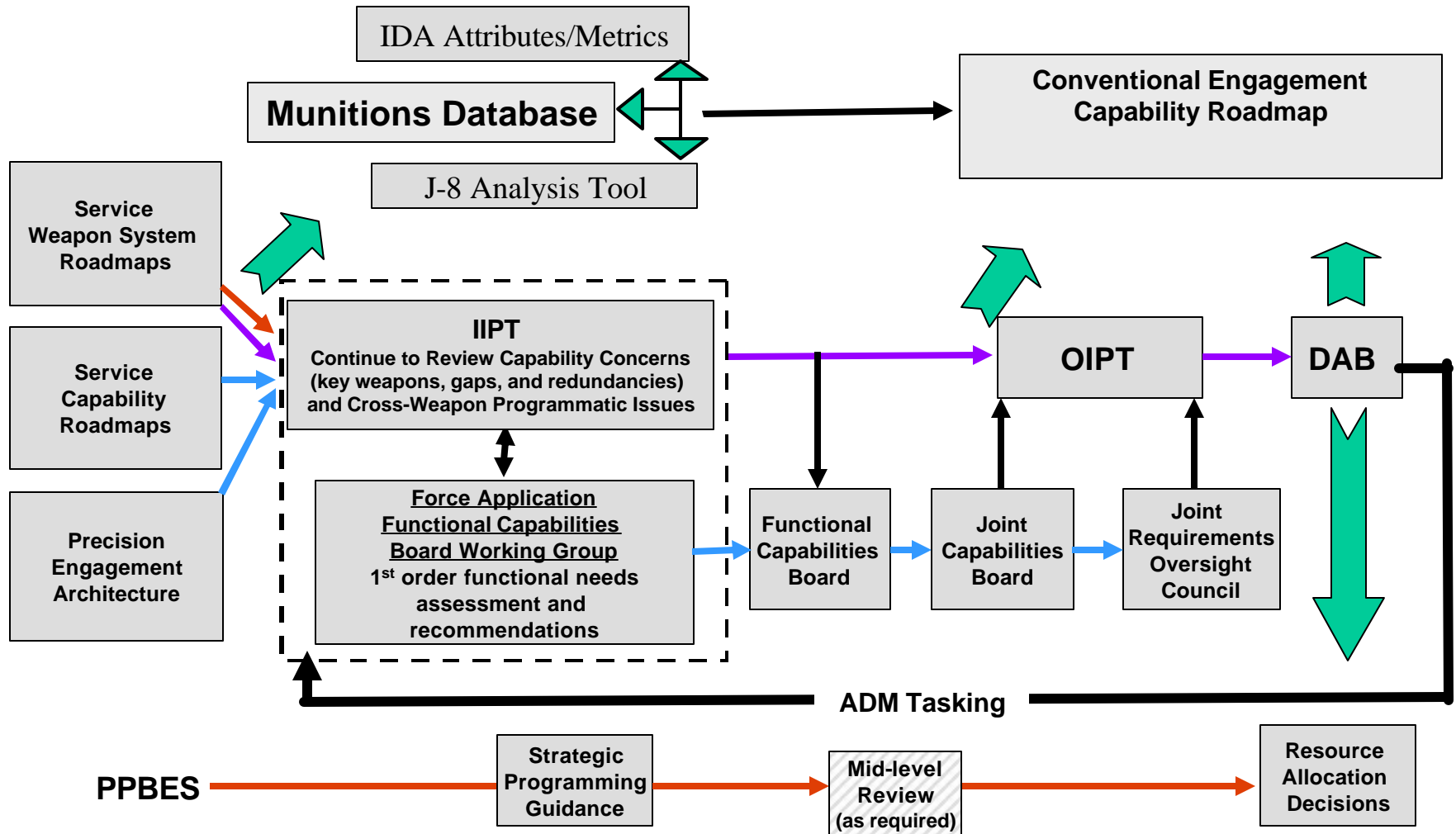
JSOW

ATACMS

Land Attack Weapon Review Process Flow



Capability Area Review – Land Attack Weapons





Products of the Review

Capability Area Review – Land Attack Weapons

- Highlighted capability concerns
 - Force Application Working Group/Functional Capability Board assessed selected aspects of the portfolio for gaps and redundancies
- Explored cross-weapon programmatic issues
 - Issues common across the weapon portfolio, both current and projected
- Offered framework for future commonality and jointness

Capability Concerns



Capability Area Review – Land Attack Weapons

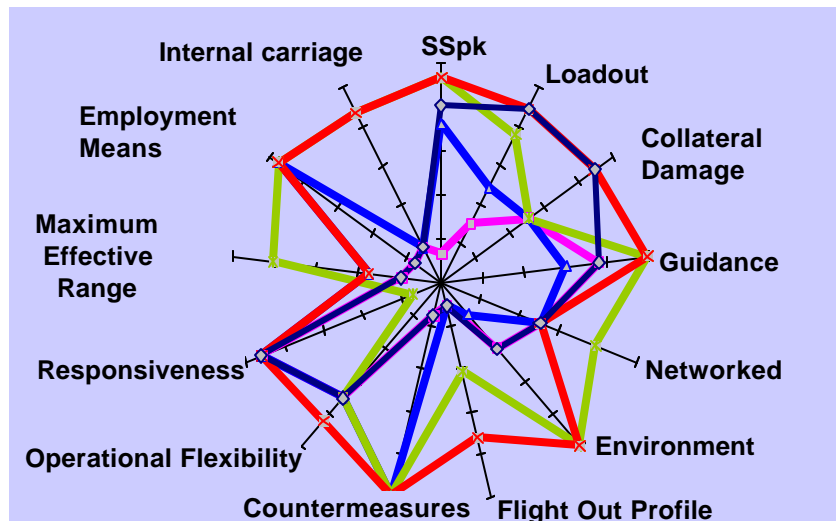
- Dealing with limited budgets
 - What is the best use of taxpayer dollar?
 - Weapons design/performance are not the primary issue
- What gaps or overages exist in capability?
 - First order assessment of gaps/redundancies
 - Do we have sufficient capability against moving/flexible targets?
 - Do we have sufficient capability against area targets?



Capability Assessments

Capability Area Review – Land Attack Weapons

- Subject Matter Experts from each Service assign Measures of Effectiveness (MOE) performance values to each weapon
 - Metrics defined –quantitative or qualitative
 - Produces a context-less understanding of weapon capabilities
- Apply weighting to each metric, MOE and attribute
 - Allows context to highlight “value to warfighter”
 - Produces a database of capability strengths and weaknesses
- Results are captured in “spider charts” and tables
 - “Spiders” reveal capability comparisons
 - Table provides rolled up weapon “Scores”
 - By target
 - Numeric value is subjective, but indicates first order comparisons



	Moving Armored Targets	Moving Semi-hard Targets	Moving Soft Targets	Moving Small Boats
Weapon A	44	46	55	48
Weapon B	19	25	55	48
Weapon C	17	22	29	12
Weapon D	20	25	30	15
Weapon E	20	22	26	18
Weapon F	20	22	26	18
Weapon G	21	24	25	19
Weapon H	23	26	28	21
Weapon I	36	40	45	47
Weapon J	49	50	54	33
Weapon K	44	50	56	32
Weapon L	31	37	52	28
Weapon M	68	68	68	49
Weapon N	71	71	71	43
Weapon O	37	42	53	34
Weapon P	36	48	59	67
Weapon Q	36	52	58	68
Weapon R	65	61	57	69
Weapon S	67	63	59	71
Weapon T	62	60	58	63
Weapon U	63	61	59	65
Weapon V	59	59	58	62
Weapon W	55	59	59	65
Weapon X	55	59	59	65
Weapon Y	51	65	63	75
Weapon Z	50	65	63	71
Weapon AA	88	88	88	89
Weapon AB	89	88	87	93

Decision Opportunity: Capability Concerns



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- Assessment results for moving target weapon development
 - Current inventory is not ideal for movers
 - New development programs (Joint Common Missile & Small Diameter Bomb Increment II), if affordable, are wise investments
- Assessment results for area submunition weapons
 - Large inventory; primarily direct attack
 - Continued concern with unexploded ordnance
 - Can we accept risk without standoff capability?
 - Services asked to make case for future standoff area weapons production



Products of the Review

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Cross-Weapon Programmatic Issues



Capability Area Review – Land Attack Weapons

- GPS upgrades
- Selective Availability Anti-Spoofing Module (SAASM)
- Fuzes
- Anti-tamper
- Sustainment and logistics; identification tags
- Thermal batteries
- Insensitive Munitions (IM)
- Variable warhead/energetics
- Battlespace awareness
- Munitions Requirements Process
- Unexploded ordnance
- Weapons datalinks
- Targeting; Battle Damage Assessment (BDA)
- Weapons Operational Test assessments
- Universal Armament Interface (UAI)
- Test and training ranges
- Industrial base/production strategies



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Framework for Jointness and Commonality



Capability Area Review – Land Attack Weapons

- Conventional Engagement Capability Roadmap and the shared munitions database
 - Must be kept current
 - Provides framework for planning; prompts, informs, and reflects decisions
- Service initiatives
 - Joint-Service Air Armaments Summit
 - Potential for joint weapon capability office(s)
 - Co-location or virtual
- Land Attack Weapons Review IIPT continues
 - Using JCIDS in parallel to assess capability areas

Way Ahead for Capability Area Reviews



Capability Area Review – Land Attack Weapons

- Continue to refine process for Capability Area Reviews
- Look to on-going area-wide reviews as pathfinders
- Apply the process to other capability areas
 - Traditional
 - Non-traditional



USD(AT&L) Imperatives

Capability Area Review – Land Attack Weapons

- “Provide a context within which I can make decisions about individual programs.”
- “Achieve credibility and effectiveness in the acquisition and logistics support processes.”
- “Help drive good systems engineering practice back into the way we do business.”



What We Need to Do Better?

Capability Area Review – Land Attack Weapons

Requirements

- Adapting to changing conditions
- Matching operational needs with systems solutions
- Overcoming biases/stovepipes
- Moving to transform military

Budget/Resources

- Laying analytical foundation for budget
- Aligning budgets with acquisition decisions

Man and Readiness

- People as a resource

Acquisition

- Acquiring systems-of-systems
- Making system decisions in a joint, mission context
- Transitioning technology
- Assessing complexity of new work and ability to perform it
- Controlling schedule and cost
- Passing operational tests
- Ensuring a robust industrial base

Sustainment

- Controlling Operations & Support costs
- Reducing logistics tails



Back-up Charts



Capability Area Review – Land Attack Weapons



IPT Members

Capability Area Review – Land Attack Weapons

- Currently ninety two members
- Represent all Services, including acquisition, requirements, and users
- Associate lead is Joint Staff (J8), support from other J codes
- D,OT&E and NGA representation
- All Service laboratories
- USD/ASD offices, including NII, I, P, AT&L